

The **SLD Series** is designed to protect 3-phase equipment against **PHASE UNBALANCE, PHASE LOSS, UNDER VOLTAGE** and **PHASE REVERSAL** conditions.

**OPERATION**

With normal operating voltage present on all three phases in the proper phase sequence, the internal relay will energize (PICK-UP). When an incorrect phase sequence or phase loss occurs or the three-phase line voltages fall outside the preset unbalance or under voltage settings, the internal relay will de-energize (DROP-OUT). When all conditions return to normal, the relay will reset.

The Adjustable Release Delay is provided to ignore momentary voltage fluctuations that cause nuisance tripping.

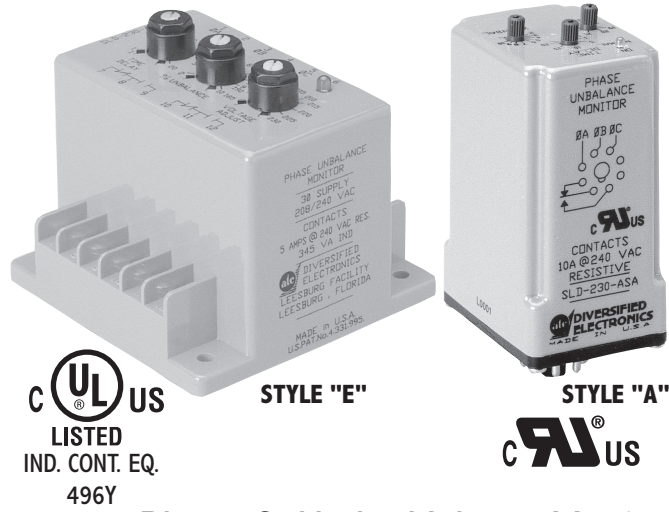
Both Delta and Wye systems may be monitored. In Wye Systems, connections to neutral are not required.

NOTE: When a phase is lost while the motor is running, a condition known as regeneration occurs where a voltage is induced into the open phase nearly equal in magnitude to the normal phase-to-phase voltage. The SLD series is designed to detect this condition when properly adjusted.

The SLD Series is UL Listed under UL File Number E55826.

**SPECIFICATIONS**

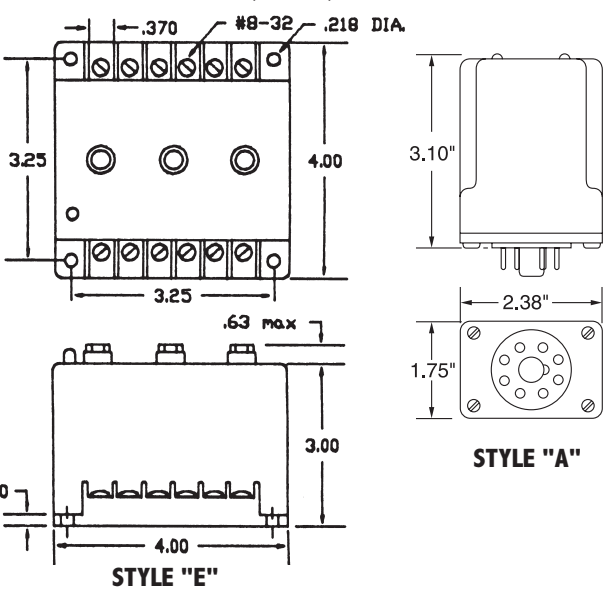
|                              |                                      |   |
|------------------------------|--------------------------------------|---|
| <b>OPERATING VOLTAGE</b>     | See Table Below                      |   |
| <b>TRANSIENT PROTECTION</b>  | 1000 Volts For 8 mSEC                |   |
| <b>RESET</b>                 | Automatic                            |   |
| <b>PHASE SEQUENCE</b>        | ABC (will not operate CBA)           |   |
| <b>PHASE UNBALANCE RANGE</b> | 2% to 10%, Adjustable                |   |
| <b>INDICATORS LED</b>        | Glows When All Conditions Are Normal |   |
| <b>RESPONSE TIMES</b>        | Operate                              | 30 mSEC   |
|                              | Release                              | 0.1 to 20 SEC, Adjustable (on Under Voltage only); 100 mSEC on Phase Reversal and Unbalance |
| <b>TEMPERATURE RATING</b>    | Operate                              | 32° to +131°F (0° to +55°C)   |
|                              | Storage                              | -49° to 185°F (-45° to +85°C)   |
| <b>U.S. PATENT NUMBER</b>    | 4,331,995                            |   |
| <b>WEIGHT</b>                | 13.5 oz.                             |   |



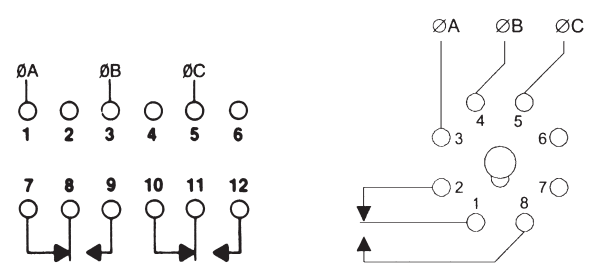
UL LISTED IND. CONT. EQ. 496Y

**Phase & Under Voltage Monitor**

**DIMENSIONS (INCHES)**



**WIRING**



| MODEL NUMBER | OPERATING VOLTAGE | UNDER VOLTAGE DROPOUT RANGE | POWER REQUIRED | HYSTERESIS | OUTPUT RATING   | ENCLOSURE |  |
|--------------|-------------------|-----------------------------|----------------|------------|---|-----------|--|
| SLD-120-ASA  | 120 VAC           | 95-115 Adj.                 | 3 VA Max.      | 2.5 VAC    | SPDT, 10 Amp, Resistive @ 240 VAC<br>1/2 HP @ 240 VAC | A         |  |
| SLD-230-ASA  | 208/240 VAC       | 185-230 Adj.                |                | 5.0 VAC    |   |           |  |
| SLD-380-ASA  | 380 VAC           | 315-390 Adj.                |                | 10 VAC     |   |           |  |
| SLD-440-ASA  | 440/480 VAC       | 370-460 Adj.                | 7 VA Max       | 5 VAC      | DPDT, 5 Amps, Resistive; 345 VA, Inductive @ 240 VAC  | E         |  |
| SLD-120-ALE  | 120 VAC           | 95-115 Adj.                 |                | 10 VAC     |   |           |  |
| SLD-230-ALE  | 208/240 VAC       | 185-230 Adj.                |                | 10 VAC     |   |           | DPDT, 3 Amps, Resistive; 360 VA, Inductive @ 600 VAC |
| SLD-380-ALE  | 380 VAC           | 315-390 Adj.                |                |            |   |           |  |
| SLD-440-ALE  | 440/480 VAC       | 370-460 Adj.                |                |            |   |           |  |

All voltage referenced are phase-to-phase.